

# Exploring Origins



## A Culturegram: Building Blocks for Contextual Classrooms

By McREL Senior Associate Elaine J. C. DeBassige D'Amato,  
Native American Liaison

# Building blocks for contextual classrooms



- \* This presentation should be used as an:
  - \* *introduction to understanding how cultural, mathematics, and science standards can be integrated and used to support one another; and*
  - \* *as an opportunity to engage in an activity that introduces cultural diversity and the understanding of cultural influences in classroom learning and participation. The activity is intended to foster a classroom environment that is safe for risk taking, change, and contextual learning.*

# Goals



- ✿ Understand the value of integrating cultural understanding into curriculum.
- ✿ Create contextual classrooms for maximum learning.

# Recipe for change as we know it, Part 1



- ✿ Attend education conference and able to self-reflect and find the warm fuzzies. **Hopeful.**
- ✿ Return to education setting and want to share the warm fuzzies and insights with others. **Inspired and motivated.**
- ✿ Your audience shows up and you can't translate your energy into useful information for others. **Perplexed but still motivated.**
- ✿ No resources or people to reference or support you. **Isolation and loss of inner power.**
- ✿ Slowly old ideas and practices take over. **Defeat.**
- ✿ Return to the next conference. **Repeat.**



The world looks so different after learning science.

For example, trees are made of air, primarily. When they are burned, they go back to air, and in the flaming heat is released the flaming heat of the sun which was bound in to convert the air into tree. And in the ash is the small remnant of the part which did not come from air, that came from the solid earth, instead.

These are beautiful things, and the content of science is wonderfully full of them. They are very inspiring, and they can be used to inspire others.

*-From Richard Feynman, the National Science Education Standards.*

# Standards and culture...not like oil and water!



- ✿ NCTM National Standards
- ✿ NRC National Science Education Standards
- ✿ Alaska Cultural Standards for Students, Teachers, Curriculum, Schools, and Community
- ✿ AISES Guidelines for Mathematics, Science, and Technology Programs

# A vision of Learning...



- ✿ Students should learn to value \_\_\_\_\_.
- ✿ Students should learn to reason \_\_\_\_\_.
- ✿ Students should learn to communicate  
\_\_\_\_\_.
- ✿ Students should become confident of their  
\_\_\_\_\_ abilities.
- ✿ Students should become \_\_\_\_\_  
problem solvers.

# A vision of teaching...



- ✿ Shift toward \_\_\_\_\_ communities, instead of separate classrooms.
- ✿ Shift away from the teacher as the sole authority of all knowledge.
- ✿ Shift away from the mere memorization of procedures and information in \_\_\_\_\_.
- ✿ Shift away from emphasizing the correct answer in \_\_\_\_\_.
- ✿ Shift away from treating \_\_\_\_\_ as an isolated body of knowledge and concepts.

# Recreating the classroom!



- ✿ Become informed.
- ✿ Bring science to your home and community.
- ✿ Take your commitment to better science education to the next level.
- ✿ Seek out like-minded adults in the community.
- ✿ Involve like-minded teachers.
- ✿ Discuss your ideas with your school's principal.
- ✿ Talk to scientists and engineers.

# Here's why you should care about culture



- ✿ Culture is the foundation of our lives. If we cannot identify where we belong in the world, then we don't have a place in it.
- ✿ It is something to be proud of.
- ✿ Each of us has a combination of several different cultures that make us unique and special.
- ✿ If you don't care about your culture, no one else will either.

# What do you know about culture?



# Race is not culture!



- ✿ ...a group of people distinguished by genetically transmitted physical characteristics.

-- *The American Heritage Dictionary*

- ✿ Note that this is NOT the most accurate definition that reflects the historical use of race as a distinction of power. It is often seen as a social construct created to separate people and impose oppressive ideals. This should accompany the dictionary definition.

# Ethnicity is not culture!



\* ...of or relating to sizable groups of people sharing a common and distinctive racial, national, religious, linguistic, or cultural heritage.

-- *The American Heritage Dictionary*

# Then what exactly is culture?



- ✿ The behavior patterns, arts, beliefs, institutions, and all other products of human work and thought, especially as expressed in a particular community or period.

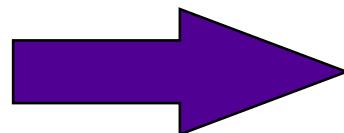
-- *The American Heritage Dictionary*

# Now I am confused!



## Race

Caucasoid, Mongoloid, etc.

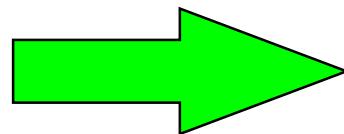


## Physical

scientific classification and identification--first assumptions

## Ethnicity

Jewish, Italian, Puerto Rican, American, Ojibwe, etc.

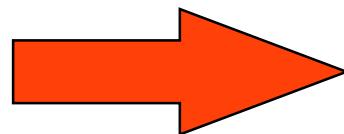


## Behavioral

bonding alike groups, custom sharing, taking part in activities

## Culture

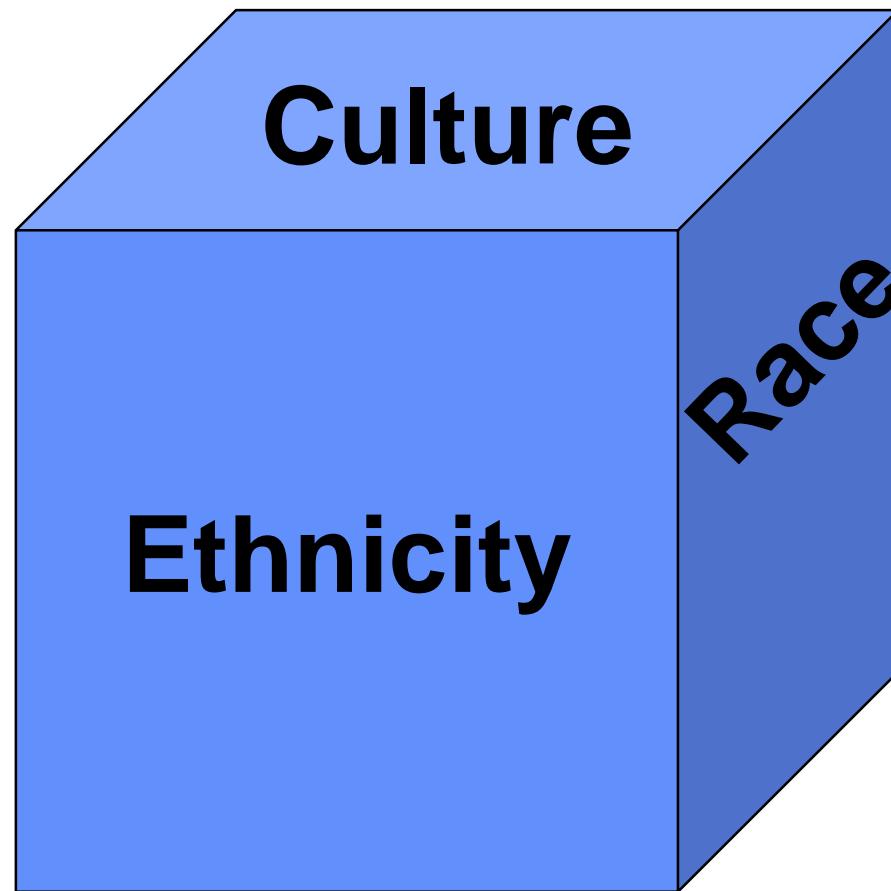
Compilation of subcultures, Rural Areas, Northeast, State specific, Art, Mathematicians, etc.



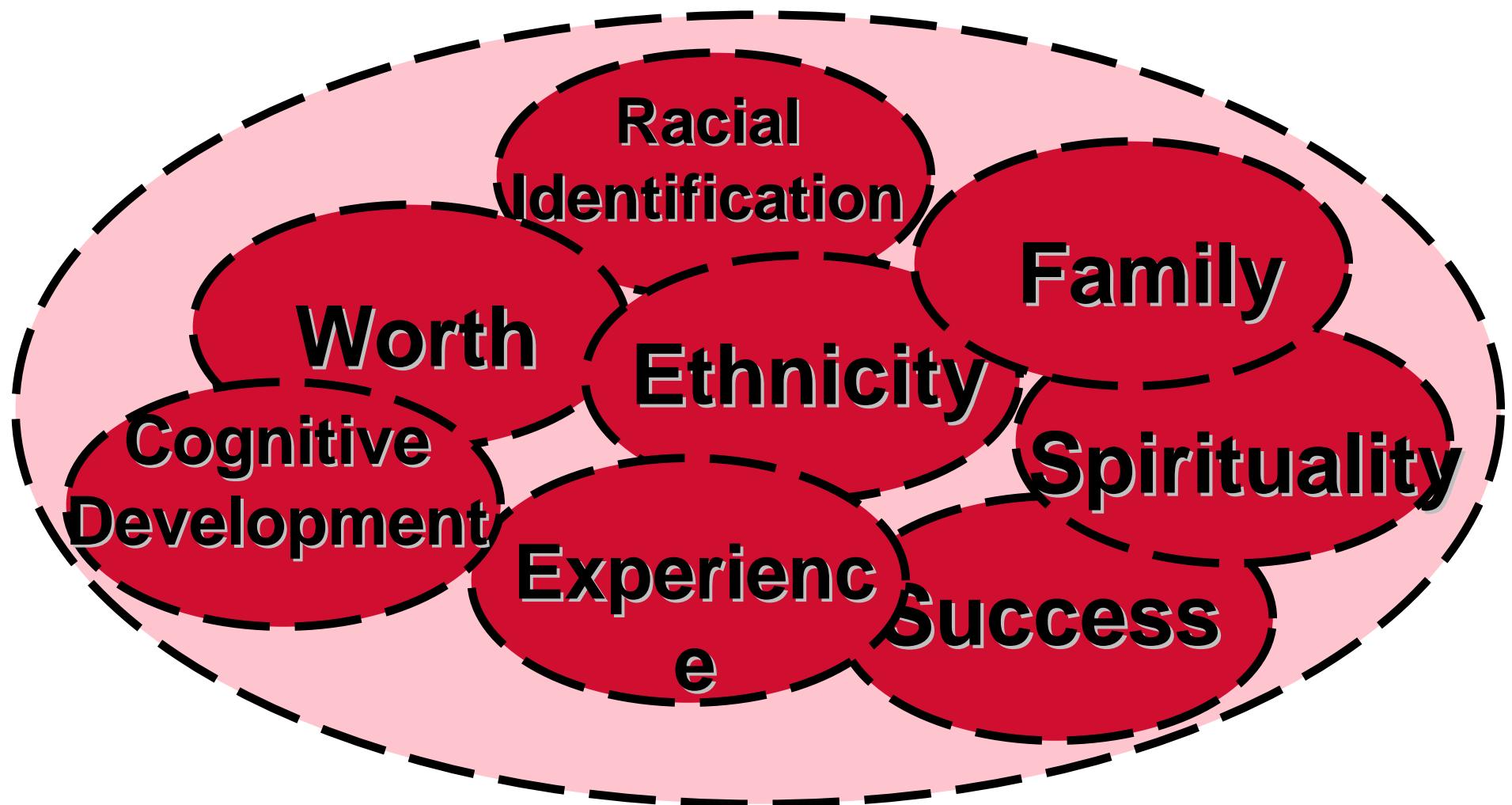
## Internal

relationship connections, creations, processes, bonding with alike belief and value systems

# Parts of the whole...



# A contextual perspective of culture...



# What do kids have to say about culture?



- ✿ Ask us who we are.
- ✿ Don't assume who we are by what we look like or what stereotype we fit.
- ✿ You don't have to understand or believe in our point of view, but you have to respect it if you want me to respect yours and the ones you are trying to teach me.
- ✿ Knowing what culture really means will give me power to teach others more about me. I don't have to hide anymore.

# Student recommendations and insights



- ✿ Learn more about the different cultures you belong to—seek elders and other community resources.
- ✿ Be proud of what you know about each part of your life. You have the power to make each part as special as you can.
- ✿ Learn which aspects of your life you have control over and which ones you don't. Try to find a way to balance each aspect.
- ✿ Help other people to understand that race, ethnicity and culture are not the same thing.

# What kids want you to know about them



- ✿ Ask students to tell you what is most important about themselves, as learners, so that you have a better understanding of how to deliver information. Students should offer ideas about how to help them learn better.
  - ✎ Students should be stakeholders in education. This discussion and exchange activity is intended to develop trust with classmates and the teacher. It also helps to alleviate the stress a student may have with class participation and collaborative/team work.

# Weaving in new approaches begins with you



- ✿ Begin to ask the hard questions and reflect, assess, and evaluate where you are and what you are doing.

*What is my role in education? What is the role of the learner? What is knowledge? How do people learn? Where are my students at in their learning and cultural identification process?*

- ✿ Look for ways to incorporate student experiences into classroom activities.

# What are you supposed to do with this now?



## Culturegram, Part 2



- ✿ Choose four crayons and draw what your culture looks like to you.
- ✿ You will have ten minutes to draw, words are not allowed.
- ✿ We will share the drawings with each other. You have the choice to not show your drawing, but you **MUST** share what is on the paper.

# Processing new information...



- ✿ Acknowledge the risks that each of them is taking by sharing a part of themselves. They are honoring the group by sharing.
- ✿ As participants have shared their Culturegrams, ask one question of them so that they can clarify and expand on ideas/experiences. Keep track of key points made by each participant.
- ✿ When all participants have shared, share your Culturegram.
- ✿ Make the links to each person in the group with the notes that you took.
- ✿ Thank everyone for their participation.

# What did you learn?



- ✿ Ask participants what they learned by doing the activity and write their responses down for everyone to see.
- ✿ Make a statement about what you learned...remember, teachers are students too!

# Nice activity, now what?



## \* Implications and Reflections

- \* Redefinition of culture
- \* Students become sources of information
- \* Students become more responsible for their learning
- \* Educators recapture the opportunity to be creative
- \* Better class participation, engagement, and risk taking
- \* Evaluation of current instructional practices
- \* Professional development to learn about resources and gain a better understanding about what is relevant
- \* Redefinition of classroom structure and duties

# Nice activity, so what?



## \* Applications

- \* Begin to incorporate what is important to the students into examples of subjects that may not seem interesting or too complex, like mathematics and science.
- \* Approach content from a learner-centered perspective.
- \* Can ask students to come up with examples from their own lives to demonstrate their knowledge of the task. This process allows students to own and construct their knowledge.